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ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.			ADKINS, CHINESSA T	
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MCLEAN, VA 22102-8064			1788	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/597,169	LAIHO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	CHINESSA ADKINS	1788

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
  - 4a) Of the above claim(s) 33-35 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32,36 and 37 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) 1-37 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/16/2008.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_.

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on 7/8/2011 is acknowledged. The traversal is on the grounds that the amendment of claim 1 to incorporate the limitation of claim 4 is outside that disclosed in US Patent No. 6,291,590, which discloses a maximum density of 942 kg/m<sup>3</sup>, making the special technical feature of the present claims different from that of the cited reference to Sainio et al. This is not found persuasive because evidence of lack of unity between the groups is found in Bohm et al. (US Patent No. 5,338,589), as shown by rejections below, wherein it is found to disclose the technical features in common between the groups. As such, the technical features in common of the claimed invention are not found to be special, since they do not define a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 2 recites the acronym "MFR<sub>2</sub>" which is unclear given that it does not define the meaning of MFR<sub>2</sub> and is therefore deemed indefinite.
5. Claims 36 and 37 provide for the use of a polymer composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

#### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 36 and 37 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

#### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 4, 7-9, 23, 25, 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Bohm et al. (US Patent No. 5,338,589).

10. Regarding claims 1, 3, 4, 7, 23 and 27, Bohm et al. teaches a polymer composition characterized in that the composition has a density of 0.930 to 0.940 g/cm<sup>3</sup> which reads on Applicant's claimed range of 930 to 950 kg/m<sup>3</sup> (col. 1, lines 23-25) comprising a bimodal/multimodal high density polyethylene (A) having a density of 0.940 to 0.960 g/cm<sup>3</sup> which reads on Applicant's claimed range of 950 to 965 kg/m<sup>3</sup> in an amount of 50 to 80% by weight which reads on Applicant's claimed range of 40 to 70 wt%; and a low density polyethylene (B) having a density of 0.910 to 0.930 g/cm<sup>3</sup> which reads on Applicant's claimed range of 910 to 935 kg/m<sup>3</sup> (col. 1, lines 30-32) in an amount of 20 to 50% by weight which reads on Applicant's claimed range of 30 to 60 wt% (col. 1, lines 23-32). While the density test method disclosed in Bohm et al. is DIN 53479, it is to be concluded that given the density range in Bohm et al., measurement according to ISO 1183-1987 would yield similar results.

11. Regarding claims 8-9, Bohm et al. teaches a composition characterized in that the high density polyethylene (A) can contain small proportions of propylene, but-1-ene, pent-1-ene, or hex-1-ene monomer units (col. 1, lines 39-42) meaning that the polyethylene comprises ethylene homopolymer and/or ethylene copolymer.

12. Regarding claim 25, Bohm et al. teaches a composition characterized in that the low density polyethylene (B) is an ethylene copolymer (col. 2, lines 63-68, col. 3, lines 1-3).

13. Regarding claim 29, Bohm et al. teaches a composition characterized in that the composition comprises additionally antioxidants, heat stabilizers and light stabilizers in an amount of 0.01 to 10% by weight which reads on Applicant's claimed range of less than 2000 ppm. One of ordinary skill in the art would be able to determine that 0.01 to 10% by weight would correspond to less than 2000 ppm.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 2, 6, 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US Patent No. 5,338,589) in view of Lindahl et al. (WO 00/71615, cited on Applicant's disclosure statement).

17. Bohm et al. is relied upon as disclosed above.

18. Regarding claim 2, Bohm et al. fails to teach a composition characterized in that composition has a melt flow rate according to ISO 1133, at 190 °C of 5 to 20 g/10 min. However, Lindahl et al. teaches a polyethylene composition comprising at least two polyethylene components (page 2, lines 5-18) characterized in that the composition has a melt flow ratio according to ISO 1133 at 190 °C of 2-100 g/10 min, preferably 4-20 g/10 min which reads on Applicant's claimed range of 5 to 20 g/10 min (page 6, lines 35-37). It is therefore determined that a *prima facie* case of obviousness exists, since the melt flow rate disclosed in Lindahl et al. overlaps the claimed melt flow rate of 5 to 20 g/10 min. MPEP 2144.05

19. Bohm et al. and Lindahl et al. are analogous because they both disclose a polyethylene extrusion coating for substrates comprising two polyethylene components, wherein at least one component is an ethylene copolymer and at least one other component is an ethylene homopolymer.

20. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to modify the melt flow ratio of the polyethylene composition of Bohm et al. to that of Lindahl et al. in order to produce an article that is resistant to stress cracking and therefore less susceptible to spillage (Lindahl et al., page 1, lines 14- 20, page 7, lines 18-26).

21. Regarding claim 6, Bohm et al. fails to teach a composition characterized in that the polyethylene (A) has a weight average molecular weight of 50000 to 150000 g/mol. However, Lindahl et al. teaches a composition comprising at least two polyethylene components characterized in that the high density polyethylene has a weight average

molecular weight of 100 to 180 kD which reads on Applicant's claimed range of 50000 to 150000 g/mol (page 6, lines 35-37 and page 7, lines 1-7). It is therefore determined that a *prima facie* case of obviousness exists, since the molecular weight disclosed in Lindahl et al. is within and overlaps the claimed molecular weight of 50000 to 150000 g/mol. MPEP 2144.05

22. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the polyethylene molecular weight of Lindahl et al. in combination with the polyethylene composition of Bohm et al. in order to improve the resulting properties such as environmental stress crack resistance of the extrusion coated article (Lindahl et al., page 1, lines 14- 20, page 7, lines 18-26).

23. Regarding claim 10, Bohm et al. fails to teach a composition characterized in that the comonomer content in the polyethylene (A) is 0.1 to 1.0% by mole. However, Lindahl et al. teaches a composition comprising at least two polyethylene components characterized in that the comonomer content in the high density polyethylene (A) is 0.1% to 6% by weight which reads on Applicant's claimed range of 0.1 to 1.0 % by mole (page 9, lines 35-37). It is therefore determined that a *prima facie* case of obviousness exists, since the comonomer weight % disclosed in Lindahl et al. overlaps the claimed comonomer content of 0.1 to 1.0% by mole. MPEP 2144.05

24. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the polyethylene comonomer content of Lindahl et al. in combination with the polyethylene composition of Bohm et al. in order to improve the

resulting properties such as environmental stress crack resistance of the extrusion coated article (Lindahl et al., page 1, lines 14- 20, page 7, lines 18-26).

25. Regarding claim 30, Bohm et al. fails to teach a coating having a coating weight of 20 g/m<sup>2</sup> made of a polyethylene composition wherein the coating has a vapor transmission rate according to ASTM E96 of less than 15.5 g/m<sup>2</sup>/24 h. However, Lindahl et al. teaches a coating having a coating weight of 20 g/m<sup>2</sup> wherein the coating has a vapor transmission rate according to ASTM E96 of 10.3 g/m<sup>2</sup>/24h which reads on Applicant's claimed range of less than 15.5 g/m<sup>2</sup>/24 h (page 13, lines 22-37). It is therefore determined that a *prima facie* case of obviousness exists, since the water vapor transmission rate disclosed in Lindahl et al. is within the claimed water vapor transmission rate of 15.5 g/m<sup>2</sup>/24 h. MPEP 2144.05

26. One of ordinary skill in the art would have been motivated to produce a coating with a vapor transmission rate of less than 15.5 g/m<sup>2</sup>/24 h such as that of Lindahl et al. in combination with the composition of Bohm et al. in order to improve the barrier properties of the resulting material (Lindahl et al., page 14, lines 8-9).

27. Claims 5, 11-17, 24, 31, 32, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US Patent No. 5,338,589) in view of Laiho et al. (EP 1449878).

28. Bohm et al. is relied upon as disclosed above.

29. Regarding claim 5, Bohm et al. fails to teach a composition characterized in that the polyethylene (A) has a melt flow rate, according to ISO 1133, at 190 °C of 5 to 20 g/10 min. However, Laiho et al. teaches a polyethylene composition comprising a high

density polyethylene (A) with a melt flow rate of 5 to 15 g/10 min according to ISO 1133 at 190 °C which reads on Applicant's claimed range of 5 to 20 g/10 min (page 3, lines 40-44, page 6, lines 46-47). It is therefore determined that a *prima facie* case of obviousness exists, since the melt flow rate disclosed in Laiho et al. is within the claimed melt flow rate of 5 to 20 g/10 min. MPEP 2144.05

30. Regarding claims 11-17, Bohm et al. fails to teach a composition characterized in that the polyethylene (A) comprises 40 to 60 % by weight of the low molecular weight fraction (LMW) as a homopolymer with a comonomer content of lower than 0.2% by mole, a density according to ISO 1183-1987 of at least 973 kg/m<sup>3</sup>, a melt flow rate according to ISO 1133, at 190 °C of 100 to 2000 g/10 min and a weight average molecular weight Mw of 10000 to 60000 g/mol and a high molecular weight fraction (HMW). However, Laiho et al. teaches a composition suitable for extrusion coating comprising low density polyethylene and high-density polyethylene (page 3, lines 36-42, page 4, lines 12-15). The high density polyethylene comprises 40 to 60 wt% of a low molecular weight component and a high molecular weight component. The low molecular weight component is a homopolymer meaning that the comonomer content is 0 which reads on Applicant's claimed range of comonomer content of lower than 0.2% by mole (page 3, lines 46-51). The low molecular weight component has a density according to ISO 1183 from about 950 to 980 kg/m<sup>3</sup> which reads on Applicant's claimed range of at least 973 kg/m<sup>3</sup>, a melt index according to ISO 1133 from about 50 to about 1000 g/10 min which reads on Applicant's claimed range of 100 to 2000 g/10 min, and a weight average molecular weight of from about 10000 to 50000 which reads on

Applicant's claimed range of 10000 to 60000 g/mol (page 3, lines 46-51, page 6, lines 46-48).

31. As set forth in MPEP 2144.05, "in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists." In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

32. Bohm et al. and Laiho et al. are analogous because they both disclose a polyethylene composition comprising a low density polyethylene and a high density polyethylene suitable for extrusion coating of substrates.

33. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the characteristics of the polyethylene composition of Laiho et al. in combination with the polyethylene composition of Bohm et al. in order to produce a composition that is used in extrusion coating at high line speeds and yields a homogenous and even coating of high quality and without any excess neck-in or draw resonance problems (Laiho et al., page 2, lines 54-56, page 3, lines 20-22).

34. Regarding claim 24, Bohm et al. fails to teach a composition characterized in that the polyethylene (B) has a melt flow rate according to ISO 1133, at 190 °C of 3 to 15 g/10 min. However, Laiho et al. teaches a composition characterized in that the low density polyethylene (B) has a melt flow rate, according to ISO 1133 at 190 °C of 3 to 18 g/10 min which reads on Applicant's claimed range of 3 to 15 g/10 min (page 3, lines 36-38, page 6, lines 46-47). It is therefore determined that a prima facie case of

obviousness exists, since the melt flow rate disclosed in Laiho et al. overlaps the claimed melt flow rate of 3 to 15 g/10 min. MPEP 2144.05

35. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the polyethylene (B) melt flow rate of Laiho et al. in combination with the polyethylene composition of Bohm et al. in order to produce polyethylene compositions with good flow characteristics and processability in extrusion coating (Laiho et al., page 3, lines 13-14).

36. Regarding claims 31 and 32, Bohm et al. fails to teach a multi-layer material comprising a paper, paperboard, aluminum film and plastic film substrate as a first layer and a polyethylene composition as at least a further layer. However, Laiho et al. teaches multi-layer structure comprising a paper, cardboard, plastic film or metal foil substrate and a polyethylene composition as at least a further layer (page 4, lines 21-27).

37. One of ordinary skill in the art at the time of the invention would have been motivated to develop a multi-layer material comprising a substrate of paper, paperboard, aluminum foil or plastic film as Laiho et al. in combination with the polyethylene composition of Bohm et al. in order to support the coating (Laiho et al., page 4, lines 21-22).

38. Regarding claims 36 and 37, Bohm et al. fails to teach use of the polyethylene composition for extrusion coating producing a multi-layer material. However, Laiho et al. teaches the use of a polyethylene composition for extrusion coating producing a multi-layer structure (page 4, lines 21-25, claim 12).

39. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the extrusion coating for producing a multi-layer material of Laiho et al. in combination with the polyethylene composition of Bohm et al. in order to provide numerous applications of the resulting polyethylene composition such as packaging and construction materials (Laiho et al., page 4, lines 26-28).

40. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US Patent No. 5,338,589) in view of Laiho et al. (EP 1449878), in further view of Lindahl et al. (WO 00/71615, cited on Applicant's disclosure statement).

41. Bohm et al. are relied upon as disclosed above.

42. Laiho et al. are relied upon as disclosed above.

43. Regarding claims 18-21, Bohm et al. fails to teach a composition characterized in that the high molecular weight fraction is an ethylene copolymer having a weight average molecular weight of 80000 to 300000 g/mol comprising ethylene and at least one C<sub>3</sub> to C<sub>20</sub> α-olefin and in that the comonomer content in the high molecular weight fraction is 0.2 to 2.0% by mole. However, Lindahl et al. teaches a composition characterized in that the high molecular weight fraction is an ethylene copolymer having a molecular weight 150-400 kD which reads on Applicant's claimed range of 80000 to 300000 g/mol (page 6, lines 24-28) comprising ethylene and at least one C<sub>3-20</sub> α-olefin (pages 3, lines 3-9) and in that the comonomer content in the high molecular weight fraction is 0.2 to 10% by weight which reads on Applicant's claimed range of 0.2 to 2.0% by mole (page 9, lines 35-37). It is therefore determined that a prima facie case of obviousness exists, since the comonomer content and molecular weight of Lindahl et al.

overlaps the claimed comonomer content of 0.2 to 2.0 % by mole and molecular weight of 80000 to 300000 g/mol. MPEP 2144.05

44. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the copolymer content and molecular weight of Lindahl et al. in order to improve the resulting properties such as environmental stress crack resistance of the extrusion coated article (Lindahl et al., pages 1 and 7).

45. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US Patent No. 5,338,589) in view of Seppanen et al. (US Patent No. 6,582,795, cited on Applicant's disclosure statement).

46. Regarding claim 26, Bohm et al. fails to teach a composition characterized in that the ethylene copolymer comprises ethylene and at least one component selected from the group consisting of vinyl acetate, vinyl acrylate, vinyl methacrylate, ethyl acrylate, methyl acrylate and butyl acrylate. However, Seppanen et al. teaches a polyethylene composition obtainable by blending two polyethylene compositions (col. 1, lines 10-14) comprising a polyethylene copolymer comprising ethylene and vinyl acetate, ethyl acrylate, methyl acrylate, and butyl acrylate (col. 5, lines 1-3).

47. Bohm et al. and Seppanen et al. are analogous because they both disclose polyethylene compositions for extrusion coating of articles such as building and construction applications.

48. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the comonomers of Seppanen et al. in combination with the ethylene copolymer of Bohm et al. in order to give the films/laminates adhesive

properties and reduce the need for intermediate tie layers between the layers in the laminate (Seppanen et al., col. 2, lines 40-44).

49. Claims 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US Patent No. 5,338,589) in view of Ohlsson et al. (US Patent Application No. 2005/0037219).

50. Regarding claim 22, Bohm et al. fails to teach a composition characterized in that the polyethylene (B) is long chain branched. However, Ohlsson et al. teaches a polyethylene useful in a multi-layer film extrusion comprising a low density polyethylene (B) with long chain branching (page 4, paragraph [0037], page 5, paragraph [0052]) and a high density polyethylene (page 5, paragraph [0053]).

51. Bohm et al. and Ohlsson et al. are analogous because they both disclose a multilayer structure formed from extrusion coating comprising a high density polyethylene and a low density polyethylene.

52. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the long chain branched polyethylene (B) of Ohlsson et al. in combination with the polyethylene composition of Bohm et al. in order to improve package integrity and resistance to puncture and tearing in the resulting coating (Ohlsson et al., page 2, paragraph [0014]).

53. Regarding claim 28, Bohm et al. fails to teach a composition characterized in that the composition comprises additionally other polymer(s) up to 20% by weight. However, Ohlsson et al. teaches a polyethylene useful in a multi-layer film extrusion

coating comprising an admixture of low density polyethylene and less than 20 wt% of a high density polyethylene and polypropylene (page 5, paragraph [0053]).

54. It would have been obvious to a person of the ordinary skill in the art at the time of the invention to use the additional polymer (polypropylene) of Ohlsson et al. in combination with the polyethylene composition of Bohm et al. in order to produce articles with resistance to puncture and tearing (Ohlsson et al., page 2, paragraph [0014]).

### ***Conclusion***

55. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHINESSA ADKINS whose telephone number is (571)270-5543. The examiner can normally be reached on Monday - Friday; 8:00 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alicia Chevalier can be reached on 571-272-1490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 1788

/C. A./  
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Examiner, Art Unit 1788  
7/25/2011